



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/774355
Source: 1 EWO
Date Processed by STIC: 2/25/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/774,355

DATE: 02/25/2004

TIME: 15:36:15

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

3 <110> APPLICANT: Firestein, Stuart
 4 Zhang, Xinmin
 6 <120> TITLE OF INVENTION: MOUSE OLFACTORY RECEPTOR GENE
 7 SUPERFAMILY
 9 <130> FILE REFERENCE: A34570-PCT-USA-A 070050.2520
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/774,355
 12 <141> CURRENT FILING DATE: 2004-02-06
 14 <150> PRIOR APPLICATION NUMBER: PCT/US02/25556
 15 <151> PRIOR FILING DATE: 2002-08-09
 17 <150> PRIOR APPLICATION NUMBER: 60/311,159
 18 <151> PRIOR FILING DATE: 2001-08-09
 20 <150> PRIOR APPLICATION NUMBER: 60/339,694
 21 <151> PRIOR FILING DATE: 2001-12-12
 23 <160> NUMBER OF SEQ ID NOS: 2596
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 924
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Mus musculus
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: MOR1-1
 35 <400> SEQUENCE: 1
 36 atgtggtcca atatcagtgc tgcccccttt ctgctgactg gcttcccagg actggaagca 60
 37 gctcatcact ggatctctat ccccttcttt gccatctata tctctgtgct tctgggcaat 120
 38 ggcacacttc tctacctcat caaggatgac cacaacctcc atgaacctat gtactatttc 180
 39 cttgccatgc tggcaggcac agacctcaca gttacactga ctacaatgcc cactgtaatg 240
 40 gctgtattat gggatgaatca tagagagata agacacggag cctgcttctt acaggcctac 300
 41 atcattcact ccctttccat tgtggagtca ggtgtcttgc ttgccatgct ttatgatcga 360
 42 tttgtcgcca tctgcacacc tctgcattac aactctatcc ttaccaattc cagggttata 420
 43 gctataggac ttgggggtggt actgaggggc tttttgtctc ttgtgcccc aatcctgcct 480
 44 ctcttttggt tctcatattg ccgttcccat gttctttctc atgccttctg cctccaccaa 540
 45 gatgtcatga aactggcatg tgetgacatt acctttaacc gcatatatcc agttgttttg 600
 46 gttgccctga ctttcttctt cgatgcgctc atcattgtct tttctatgt cctcattctg 660
 47 aagacagtta tgggcattgc ctctggagag gagagagcaa aggcctccta cacctgtgtt 720
 48 tcacacatta gctgtgtcct ggtcttttac atcactgtga ttggcctgac cttcattcac 780
 49 aggtttggaa agaacgctcc ccatgtggtg cacattacca tgagctatgt ctactttctc 840
 50 tttctccat ttatgaacct catcatttac agcatcaaga ccaagcaaat tcagaggagt 900
 51 gttctccatc tctatctgt ataa 924
 53 <210> SEQ ID NO: 2
 54 <211> LENGTH: 948
 55 <212> TYPE: DNA
 56 <213> ORGANISM: Mus musculus
 58 <220> FEATURE:

Does Not Comply
Corrected Diskette Needed

see pp 6-8

RAW SEQUENCE LISTING

DATE: 02/25/2004

PATENT APPLICATION: US/10/774,355

TIME: 15:36:15

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

59 <223> OTHER INFORMATION: MOR1-2

61 <400> SEQUENCE: 2

```

62 atgccttcaa tgtggctcaa catttctctt tccccattcc tgctcacagg cttcccaggt 60
63 ctggagaaaag cccatcacct gatctccctc ccattactga tggcctatat ctccatattg 120
64 cttggcaacg gcaccctcct tttcctcatt aaggatgacc ataacctcca tgagcccatg 180
65 tattatttct taggtatgtt ggcagctaca gatcttgag taacattgac caccatgccc 240
66 acagtgtga gtgtactatg gttaaatcac agggaaattg gccatggagc ctgcttctct 300
67 caggcctatt ttatccacac tctctctatt gtggagtcgg gggctttgct tgccatggcc 360
68 tatgaccgtt tcattgccat tcgcaaccca ctaaggata ccaccatcct tacagatact 420
69 aaghtaataa agattggcat aggttagtg atgagggtg gtctgtcaat catgccaata 480
70 atcattcgcc tgcattggtt tccctattgt cgtctccatg tactctccca tgctttctgt 540
71 ctacaccaag atgtcatcaa gctagcctgc gctgacatca cattcaatcg tctctatcct 600
72 gttgtggttg tatttgcaat ggtcttgcta gatttctga tcatcttctt ctctacgtt 660
73 ttgattctca agactgtcat gggcattgct tctacagatg agcgggcca ggctctcaac 720
74 acatgtgtct cccacatctg ttgcatcttg gtcttctatg tcaactgtgtg ttggtctgacg 780
75 tttattcaca ggtttgaaa gaatgttctt catgtcgtcc acatcacaat gagctacatc 840
76 tactttcttt tcccccttt tatgaacct gtcactata gcattaagac caaacagatt 900
77 cagagtgggt tgcttcgctt gttctccctg ccttgttcta aaacctga 948

```

79 <210> SEQ ID NO: 3

80 <211> LENGTH: 936

81 <212> TYPE: DNA

82 <213> ORGANISM: Mus musculus

84 <220> FEATURE:

85 <223> OTHER INFORMATION: MOR1-3

87 <400> SEQUENCE: 3

```

88 atgtggccca acagcagtga tgctccttcc ctactgactg gctttctggg cttggaaatg 60
89 attcaccact gcatctctat ccttttcttt gtcactact tctccatcat ttaggggaat 120
90 ggtacccttc tcttcatcat ttggagtgc cacagccttc atgagcccat gtactacttc 180
91 ttggctgtgc tggcaagtat ggaccttggg atgacactaa ccacgatgcc caccgtgctg 240
92 ggtgtcctgg tgctaaacca gagggagatt gtacatgggg cctgtttcat tcagtcctac 300
93 ttcatctact cactagccat tgtagaatcg ggggtcttgc ttgccatgtc ttatgatcga 360
94 tttgttgcca tctgcacacc tctgcattac aactctatcc ttaccaatc cagggtgatg 420
95 aagatggcac tgggagcact gtcagagga tttgtgtcca tctgtcccc aatcatgcct 480
96 ctcttttggg tccatactg ccattcccat gttctttctc atgccttctg cctccaccaa 540
97 gatgtcatga aactggcatt tgctgacatt acttttaacc tcatatatcc agttgttttg 600
98 gttgccctga ctttcttctt cgatgcgctc atcattatct tttcctatgt cctcattctg 660
99 aagaaagtta tgggcacgc ctctggagag gagagaaaaa agtctctcaa cacctgtgtt 720
100 tcacacatta gctgtgtcct ggtcttttac atcactgtga ttggcctgac cttcattcac 780
101 aggtttggaa agaacgtccc ccatgtggtg cacattacca tgagctatgt ctactttctc 840
102 tttcctccat ttatgaacct catcatttac agcatcaaga ccaagcaaat tcagaggagc 900
103 attctccgtc tactgtccaa acacagtagg acttga 936

```

105 <210> SEQ ID NO: 4

106 <211> LENGTH: 954

107 <212> TYPE: DNA

108 <213> ORGANISM: Mus musculus

110 <220> FEATURE:

111 <223> OTHER INFORMATION: MOR1-4

113 <400> SEQUENCE: 4

```

114 atgcctgtaa tttggtcaa cacctcaacc taccattcc tgctcacagg cttcccaggt 60

```

RAW SEQUENCE LISTING

DATE: 02/25/2004

PATENT APPLICATION: US/10/774,355

TIME: 15:36:15

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

```

115 ctggagaaat cccatcacct gatctccctc ccattactga tggcctatat cttcatattg 120
116 cttggcaacg gcaccctcct tttcctcatt aaggatgacc acaacctcca tgagcccatg 180
117 tattatttct taggtatgct ggcagctacg gatcttggag taacattgac caccatgccc 240
118 acagtgtctg gtgtactatg gttaaatcac agggaaattg gccatggagc ctgcttctct 300
119 caggcctatt ttatccatag tttctctatt gtggagtcgg gggctcttgc tgccatggcc 360
120 tatgaccgtt tcattggcat tcgcaacca ttaagatata ccaccatcct tactgatatt 420
121 aaggtaataa agattggcat aggcgtagtg atgagggtg gtctttcaat catgccaata 480
122 atcattcgac tgcattgggt tccctattgt cgctcccatg tactctccca tgctttctgt 540
123 ctacaccaag atgtcatcaa gctagcctgt gctgacatca cattcaatcg tctctatcct 600
124 attgttgttg tattttgcat gggacttttg gattttttga ttatttgttt ctctacatt 660
125 ttgattctca agactgtcat gggcattgct tctacagatg agcggggcaa ggctctcaac 720
126 acatgtgtct cccatatctg ttgcatcttg gtcttctatg tcaactgtgtg tggtttgaca 780
127 tttattcaca ggtttggaaa gaatattcct catattgtac atataacaat gagctacatc 840
128 tgcttccttt tccccccatt tatgaacct gtcattctca gtattaagac caaacagatt 900
129 cagagtgtt tgcttcgctt gttctcactg ccttattcta gaattcgact ctga 954

```

131 <210> SEQ ID NO: 5

132 <211> LENGTH: 945

133 <212> TYPE: DNA

134 <213> ORGANISM: Mus musculus

136 <220> FEATURE:

137 <223> OTHER INFORMATION: MOR13-1

139 <400> SEQUENCE: 5

```

140 atgggaggtg aagcccacaa cagctctggg ttgcctccct tcattcttgac aggactgcca 60
141 gggatggaga cctcccagca ctggttggtc ctgctccttg gtgttcttta cagcgtctcc 120
142 atagtgggca atgccctgat tctgttcac atcaaggagg aagagagtct tcaccagccc 180
143 atgtactact tcctatctct gctgtcagga aatgaccttg gtgtgtcttt ctccacactg 240
144 cctacagttc tgggagtgtt ttgttttcac ttaagagaga tcagttttaa ctctgcatg 300
145 tcccaaagt tctttatcca tctttctct ttcattggag ctgggattct gctggccatg 360
146 agctttgatc gctatgtagc catctgtaac ccactgcgt attccacagt actcactgat 420
147 gcccgagtga tgtggatggg tgtatgtgt ttccttcgaa gtttctgcat gattttccca 480
148 ttacctttcc ttctgaagag gttgcccctc tgcaaggcta atgtgctctc tcatgcctac 540
149 tgtctgcatc ctgatctgat tcgactgcct tgtggtgaca cttccattaa taatatattt 600
150 ggtctgtcca ttgtcatctc tacctttggg ctggattctg cactcatttt cctttcttat 660
151 gttctcatac ttcgctcagt gcttgcatt gcctcccggg aagaaaggat gaaaacactg 720
152 aatacatgtg tgtcacacct gtgtgctgtg ctcatcttct atgtgcctaa ggtaggtgtg 780
153 tccatgtttg ctgcctatgg gaggcacgcc cctcactatg tacacacact cttgtcactc 840
154 atctatctct ttgttcctcc aatgctcaac cctgtcatct actccatcaa aaccaaggag 900
155 attcgtcgga ggttttgcaa aatcctgctg gggaacaaat tttga 945

```

157 <210> SEQ ID NO: 6

158 <211> LENGTH: 966

159 <212> TYPE: DNA

160 <213> ORGANISM: Mus musculus

162 <220> FEATURE:

163 <223> OTHER INFORMATION: MOR5-1

165 <400> SEQUENCE: 6

```

166 atgttgctc catcaagtat gtcagaagta actaacacca ctcatggccc tttctacttc 60
167 atcctcaccg gcatcccagg atttgaggat atccatctct ggatctccat ccccttcttc 120
168 tgctctaca ccatatccat catgggcaac accaccatcc taactgtcat ccgcacagag 180
169 ccactctccc acgagcccat gtacctcttc ctctctatgc tggccctcac tgacctgggt 240

```

RAW SEQUENCE LISTING

DATE: 02/25/2004

PATENT APPLICATION: US/10/774,355

TIME: 15:36:15

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

```

170 ctaactctca ccacactccc tacagtcacg caggctcctc ggttcaacat tcgggaaatc 300
171 agctttgagg cctgctttgc acaggtattc ttctccatg ggttctcatt catggaatca 360
172 tctgttctat tggccatgct ctttgaccgt tatgtggcca tctgtcgccc actccactat 420
173 gctcccatcc tcaccagtga ggtcattgct agaatagggt tggccatcat ttgccgctgt 480
174 gtcttggtctg ttcttccctc ccttttccctg ctcaagcgcc tgcccttctg ccattcccac 540
175 ctcttttctc actcctactg cctccaccag gatatgattc acctggtctg cgctgacatc 600
176 agagtcaaca gatggtacgg atttgctctg gtctgtctca ttattgtatt ggacctctg 660
177 ctcatgttac tctcctatgc acttattcctg aaaagtgtcc tgaacacagc cacttggact 720
178 gaacgactcc gggctctcaa caactgtctg tcccacatgc tagctgttct ggttctctat 780
179 gtccctatgg ttggtgtgtc tatgactcac cgctttgcga agcatgtctc tccactggtc 840
180 catgttctca tggccaatat ctatctgtctg gcacctcctg tgatgaacct catcatttac 900
181 agtgtaaaga ccaagcagat ccgtcaagga attactcgcc tcctgttgca aagaaagggtg 960
182 cactaa 966

```

184 <210> SEQ ID NO: 7

185 <211> LENGTH: 954

186 <212> TYPE: DNA

187 <213> ORGANISM: Mus musculus

189 <220> FEATURE:

190 <223> OTHER INFORMATION: MOR2-1

192 <400> SEQUENCE: 7

```

193 atgaagggtg ctattccacc acgtgccaac ttacagctacg ctatatTTTT gctcaccggc 60
194 ttcccagggtc tggaaatgggc tcatcattgg atttcactgc ccatatttat ggggtatttt 120
195 gtagccatca tgggtaatgc cactatcttg catctggttc gaactgacct ttccctccac 180
196 cagcccatgt actacttctt ggccatcttg gccgtgacag acctgggctt atgcatgtca 240
197 acgtgcctt ctgtgctggg ggtgttatgg ttgatgccc ggatggtggg tctggtgccc 300
198 tgtgtgctcc agcagcactt cctccactct ttctccttca tggaatcagc agtgctattt 360
199 gctatggctc tggaccgtct gatagcaatc cgattcccgc tgcgctatgc atctgtgctc 420
200 actgggcccc gtgtggcatt gataggcacg gtgctgggta tgcggagtgc agctattaca 480
201 gccgcacct cactacatct actgacattt gactactgtc accctggtgc tctctcccat 540
202 gcctattgtc ttcatcagga catgatccgt ctggcctggt ctgacaccog cttcaacaga 600
203 ctctatggac tgtgcatcat catgctagcc atgggttcag atgtcctctt catcctgctc 660
204 tcctacgtct tcatcctccg cacagtgtct gccattgect ctgcagggga gaggetcaag 720
205 gccctcaaca cgtgcgtctc ccacatcctg gctgtactct gtttttatgt tcctgttctg 780
206 ggctgtcca ttgtgcacag atttgacag cacacctcac cctggtgca catcctaag 840
207 ggcacagtgt ctgtgtttt tccaccctg atgaacctg ttatctacag catcaagacc 900
208 caacagatcc gcagggccat tgtcaagggt atttcactgg gtaagattca gtaa 954

```

210 <210> SEQ ID NO: 8

211 <211> LENGTH: 966

212 <212> TYPE: DNA

213 <213> ORGANISM: Mus musculus

215 <220> FEATURE:

216 <223> OTHER INFORMATION: MOR5-2

218 <400> SEQUENCE: 8

```

219 atgttgcatc catcaagtat gtcagaagta acaaacacca ctcatgatcc tttctacttc 60
220 atcctcaccg gcatcccagg atttgaggat atccatctct ggatctccat tcccttattc 120
221 tgctctaca ccatctccat catgggaaac accaccatcc taaccgttat ccgcacagag 180
222 ccatctctcc accagcccat gtacctcttc ctctccatgc tggccctcac tgacctgggt 240
223 ctaactctca ccacactccc tacagtcacg cagctcctt ggttcaacat ccgagaaatc 300
224 agctttgagg cctgttttgc ccagttcttc ttctccatg ggttctcttt catggaatca 360

```

RAW SEQUENCE LISTING

DATE: 02/25/2004

PATENT APPLICATION: US/10/774,355

TIME: 15:36:15

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

```

225 tctgttctat tggccatgtc ctttgaccgt tatgtggcca tctgtcgecc actccactat 420
226 gcctccatcc tcaccagtga ggtcattgct agaatagggt tggccatcat ttgccgctgt 480
227 gtcttggtcg ttcttccctc ccttttctcg ctcaagcgcc tgcccttctg ccattcccac 540
228 cttatttctc actcctactg cctccaccag gatatgattc acctggctcg cgctgacatc 600
229 agagtcaaca gctgggtacgg atttgcctt gtccctgtca ttattgtatt ggacctctg 660
230 ctcatgttac tctcctatgc acttatectg aagagtgtct tgaacacagc cacttggact 720
231 gaacgactcc gggctctcaa caactgtctg tcccacatgc tggctgttct ggttctctat 780
232 gtccctatgg ttggtgtgtc tatgaetcac cgctttgcc aagcatgcctc tccactggtc 840
233 catgttctca tggccaatat ctacctgcta gcacctctg tgatgaacct catcatttac 900
234 agtgtaaaaga caaagcagat ccgtcaagga attactcgcc tcctcttgca gagaaagggt 960
235 cactga 966

```

237 <210> SEQ ID NO: 9

238 <211> LENGTH: 981

239 <212> TYPE: DNA

240 <213> ORGANISM: Mus musculus

242 <220> FEATURE:

243 <223> OTHER INFORMATION: MOR31-1

245 <400> SEQUENCE: 9

```

246 atgaagggtg cctcttcctt tcacaatgac accaatccac aggatgtgtg gtatgttctg 60
247 attggaattc caggactaga agatctacac tctggatag ccattcccat ctgttctatg 120
248 tacatcgtgg ctgctatagg caatgtctc ctaatcttcc tgatagtga tgaacgcagt 180
249 ctgcatgagc ccatgtattt ttttctctcc atgctggcat tagcagacct cctgctctcc 240
250 acagctacag cccccaagat gctggctatc ttctggtttc attccagggg tatatccttt 300
251 ggtagtgtg tgtcccaaat gttcttcata catttcatct ttgtggcaga gtctgctatt 360
252 cttctggcca tggcatttga ccgctatgtg gccatctgtt acccactgag atacaccacc 420
253 atccttactt cctcagtcac tggcaagatt ggcacagcag ctgtggtcag aagctttctc 480
254 atctgttttc cattcatctt cctgggtatat cgacttctgt attgtgggaa acacataatt 540
255 cccattcat actgtgagca catgggcatt gccagattgg catgcgacaa tatcactgtc 600
256 aacatcatat atgggctgac aatggccctc ctgtctactg ggctagatat actactcatc 660
257 attatttctt acaccatgat tcttcgcact gtttttcaaa tcccttctcg ggctgccaga 720
258 tacaaggccc tcaacacatg tggctccac atctgtgtta ttcttttatt ctacactcct 780
259 gcattctttt cattttttgc ccacgcctt ggaggcaaaa ccgttctctg ccacatccac 840
260 atcctagtgg ccaacctcta cgtgggtgtg cccccaatgc ttaaccctat catctatggt 900
261 gtgaagacca agcagatcca agatcgagt gttttccttt tctctcagt gagtacatgt 960
262 caacatgaca gcagatgtta a 981

```

264 <210> SEQ ID NO: 10

265 <211> LENGTH: 948

266 <212> TYPE: DNA

267 <213> ORGANISM: Mus musculus

269 <220> FEATURE:

270 <223> OTHER INFORMATION: MOR31-2

272 <400> SEQUENCE: 10

```

273 atgcttgga ctaacttcac tatcatccat ccaactgtgt tcactctgct tggaaatccca 60
274 gggctggagc agtaccacac ctggttttct attccttttt gtcttatgta cattgctgca 120
275 gtcttgggga acggagccct catccttggt gtcttgagt aacgcaccct ccatgagccc 180
276 atgtatgtct ttctgtccat gctggctggc actgatattc tcctgtcaac caccactgtg 240
277 cctaagacct tggctatctt ttggttccat gctggggaga tcccctttga tgctgcatt 300
278 gctcagatgt ttttcatcca cggtgttttt gtggctgagt cgggaatcct tctggccatg 360
279 gcatttgacc gatatgtggc tatttgtact cctctgagat actcagccgt cttaacacct 420

```

10/774,355 6

<210> SEQ ID NO 795
 <211> LENGTH: 926
 <212> TYPE: DNA
 <213> ORGANISM: Mus musculus
 <220> FEATURE:
 <221> NAME/KEY: variation (265) 'g' is at location 264
 <222> LOCATION: (264) .. (284)
 <223> OTHER INFORMATION: MOR40-5
 <223> OTHER INFORMATION: Any nucleotide A, C, G or T
 <400> SEQUENCE: 795

Please ensure
 all <222>
 responses are
 exact locations
 of n's

insert
 the
 <223> line
 describing
 n's directly
 under the
 <222> line;
 then,
 insert
 another

atgggtactg ccctgcatga aaccaacagc tcagaggctc acgtgtctga gttcattctg 60
 ctgggattcc caggcattca tgaattccag atctggctgt ccttgccctat ggctctgctt 120
 tacattgtag ctcttggtgc taatctcctt atcttgatca ccatctacct tgagccctacc 180
 ctgcatcagc caatgtatca gtttcttggg atcttggtctg cagtagatat tggcttggct 240
 accaccagca tgcccaaaat acggnnnnnn nnnnnnnnnn nnnntatgt atccacactt 300
 ttatgtgcat ggagtcaggc gtcttcctat gcatggcaat agatagatat gtagccattt 360
 gttatccctt ccagtatcct tccatagtca ctgaagcttt tgtaatcaag gccacactgt 420
 ccattgctgt caggaatggc ctgttaacca tcccagtgc tgtactagct gccagagac 480
 aatactgctc caggaatgaa atagatcact gcctttgctc taacttgggg gtcattagtc 540
 tggcctgtga tgatcact gttaacagat tctaccagtt ggcatggcc tggcttgtgg 600
 taggaagtga catgattctg gtctatgctt cttacgcttt gattattcgc tcagtgtga 660
 ggctgaactc cactgaggca gcatctaagg ccctcagcac ctgcagctcc cacctcatcc 720
 tcattatgtt ttactacaca gctattgtta tagtatctgt tactcaccta gcaggaagaa 780
 gggttccctt catccctgtt ctctcaatg tgatgcatat tgtcaccct ccacccctta 840
 accccgtggt atatgccctt aggacacagg agctgaaagt gggcttccgg aagggtttta 900
 gctgagtga gtttgtgtct aggaag 926

throughout
 sequence
 listing
 This
 sequence
 is a
 sample.

<220>
 line above <223> MOR40-5

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/10/774,355

DATE: 02/25/2004

TIME: 15:36:16

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:795; N Pos. 265,266,267,268,269,270,271,272,273,274,275,276,277,278
 Seq#:795; N Pos. 279,280,281,282,283,284
 Seq#:817; N Pos. 186,187,188,189,190,191,192,193,194,195,196,197,198,199
 Seq#:817; N Pos. 200,201,202,203,204,205,206,207,208,209,210,211,212,213
 Seq#:817; N Pos. 214,215,216,217,218,219,220,221,222,223,224,225,226,227
 Seq#:817; N Pos. 228,229,230,231,232,233,234,235,236,237,238,239,240,241
 Seq#:817; N Pos. 242,243,244,245,246,247,248,249,250,251,252,253,254,255
 Seq#:817; N Pos. 256,257,258,259,260,261,262,263,264,265,266,267,268,269
 Seq#:817; N Pos. 270,271,272,273,274,275,276,277,278,279,280,281,282,283
 Seq#:817; N Pos. 284,285,286,287,288,289,290,291,292,293,294,295,296,297
 Seq#:817; N Pos. 298,299,300,301,302,303,304,305,306,307,308,309,310,311
 Seq#:817; N Pos. 312,313,314,315,316,317,318,319,320,321,322,323,324,325
 Seq#:817; N Pos. 326,327,328,329,330,331,332,333,334,335,336,337,338,339
 Seq#:817; N Pos. 340,341,342,343,344,345,346,347,348,349,350,351,352,353
 Seq#:817; N Pos. 354,355,356,357
 Seq#:818; N Pos. 308,309,310,311,312,313,314,315,316,317,318,319,320,321
 Seq#:818; N Pos. 322,323,324,325,326,327
 Seq#:848; N Pos. 613,614,615,616,617,618,619,620,621,622,623,624,625,626
 Seq#:848; N Pos. 627,628,629,630,631,632,633,634,635,636,637,638,639,640
 Seq#:848; N Pos. 641,642,643,644,645,646,647,648,649,650,651,652,653,654
 Seq#:848; N Pos. 655,656,657,658,659,660,661,662,663,664,665,666,667,668
 Seq#:848; N Pos. 669,670,671,672,673,674,675,676,677,678,679,680,681,682
 Seq#:848; N Pos. 683,684,685,686,687,688,689,690,691,692,693,694,695,696
 Seq#:848; N Pos. 697,698,699,700,701,702,703,704,705,706,707
 Seq#:852; N Pos. 213,214,215,216,217,218,219,220,221,222,223,224,225,226
 Seq#:852; N Pos. 227,228,229,230,231,232,233,234,235,236,237,238,239,240
 Seq#:852; N Pos. 241,242,243,244,245,246,247,248,249,250,251,252,253,254
 Seq#:852; N Pos. 255,256,257,258,259,260,261,262,263,264,265,266,267,268
 Seq#:852; N Pos. 269,270,271,272,273,274,275,276,277,278,279,280,281,282
 Seq#:852; N Pos. 283,284,285,286,287,288,289,290,291,292,293,294,295,296
 Seq#:852; N Pos. 297,298,299,300,301,302,303,304,305,306,307,308,309,310
 Seq#:852; N Pos. 311,312,313,314,315,316,317,318,319,320,321,322,323,324
 Seq#:852; N Pos. 325,326,327,328,329,330,331,332,333,334,335,336,337,338
 Seq#:852; N Pos. 339,340,341,342,343,344,345,346,347,348,349,350
 Seq#:856; N Pos. 558,559,560,561,562,563,564,565,566,567,568,569,570,571
 Seq#:856; N Pos. 572,573,574,575,576,577
 Seq#:858; N Pos. 691,692,693,694,695,696,697,698,699,700,701,702,703,704
 Seq#:858; N Pos. 705,706,707,708,709,710,711,712,713,714,715,716,717,718
 Seq#:858; N Pos. 719,720,721,722,723,724,725,726,727,728,729,730,731,732
 Seq#:858; N Pos. 733,734,735,736,737,738,739,740,741,742,743,744,745,746
 Seq#:858; N Pos. 747,748,749,750,751,752,753,754,755,756,757,758,759,760
 Seq#:858; N Pos. 761,762,763,764,765,766,767,768,769,770,771,772,773,774
 Seq#:858; N Pos. 775,776,777,778,779,780,781,782,783,784,785,786,787,788

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/10/774,355

DATE: 02/25/2004

TIME: 15:36:16

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

Seq#:858; N Pos. 789,790,791,792,793,794,795,796,797,798,799,800,801,802
Seq#:858; N Pos. 803,804,805,806,807,808,809,810,811,812,813,814,815,816
Seq#:858; N Pos. 817,818,819,820,821,822,823,824,825,826,827,828,829,830
Seq#:858; N Pos. 831,832
Seq#:859; N Pos. 597,598,599,600,601,602,603,604,605,606,607,608,609,610
Seq#:859; N Pos. 611,612,613,614,615,616,617,618,619,620,621,622,623,624
Seq#:859; N Pos. 625,626,627,628,629,630,631,632,633,634,635,636,637,638
Seq#:859; N Pos. 639,640,641,642,643,644,645,646,647,648,649,650,651,652

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/774,355

DATE: 02/25/2004

TIME: 15:36:16

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number
L:20778 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:20779 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:20787 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:795 after pos.:240
L:21335 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:21336 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:21343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:817 after pos.:180
M:341 Repeated in SeqNo=817
L:21365 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:21366 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:21375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:818 after pos.:300
L:22100 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22101 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:848 after pos.:600
M:341 Repeated in SeqNo=848
L:22197 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22198 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:852 after pos.:180
M:341 Repeated in SeqNo=852
L:22291 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22292 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:856 after pos.:540
L:22344 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22345 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:858 after pos.:660
M:341 Repeated in SeqNo=858
L:22376 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22377 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:859 after pos.:540
M:341 Repeated in SeqNo=859
L:22406 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22407 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:860 after pos.:600
L:22437 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22438 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:861 after pos.:240
M:341 Repeated in SeqNo=861
L:22467 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22468 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22477 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:862 after pos.:300
M:341 Repeated in SeqNo=862
L:22517 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22518 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22529 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:864 after pos.:420
M:341 Repeated in SeqNo=864
L:22590 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:22591 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!
L:22599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:867 after pos.:240

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/774,355

DATE: 02/25/2004

TIME: 15:36:16

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

M:341 Repeated in SeqNo=867

L:22827 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:22828 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:22837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:877 after pos.:300

M:341 Repeated in SeqNo=877

L:22886 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:22887 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:22899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:879 after pos.:480

M:341 Repeated in SeqNo=879

L:22914 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:22915 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:22924 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:880 after pos.:300

M:341 Repeated in SeqNo=880

L:23071 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23072 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23084 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:886 after pos.:480

M:341 Repeated in SeqNo=886

L:23174 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23175 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:890 after pos.:360

M:341 Repeated in SeqNo=890

L:23364 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23365 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:897 after pos.:660

M:341 Repeated in SeqNo=897

L:23394 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23395 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:898 after pos.:600

L:23449 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23450 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:900 after pos.:420

L:23586 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23587 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:905 after pos.:420

M:341 Repeated in SeqNo=905

L:23641 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23642 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:907 after pos.:480

M:341 Repeated in SeqNo=907

L:23689 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23690 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:909 after pos.:240

L:23719 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

L:23720 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!

L:23736 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:910 after pos.:720

M:341 Repeated in SeqNo=910

L:23796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:913 after pos.:360

L:24095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:925 after pos.:420

L:24172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:928 after pos.:240

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/774,355

DATE: 02/25/2004

TIME: 15:36:16

Input Set : D:\sequencelisting

Output Set: N:\CRF4\02252004\J774355.raw

M:341 Repeated in SeqNo=928

L:24387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:937 after pos.:0

M:341 Repeated in SeqNo=937

L:24422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:938 after pos.:240

L:24505 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:941

L:24505 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:941

L:27062 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:1048

L:27062 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:1048

L:30898 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:1205

L:30898 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:1205

L:74162 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2152

L:74259 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2154

L:75100 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2173

L:75211 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2175

L:75549 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2182

L:76237 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2196

L:77987 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2235

L:78208 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:2239

L:81613 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2321

L:88227 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2477